



# UNITED STATES PATENT AND TRADEMARK OFFICE

*WJH*

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,611	01/26/2001	Keisei Yamamuro	FUR0010-PCT	1619
7055	7590	08/01/2006	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			CHOWDHURY, SUMAIYA A	
			ART UNIT	PAPER NUMBER
			2623	

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/744,611	YAMAMURO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sumaiya A. Chowdhury	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9, 12, 13 and 15-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12, 13 and 15-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                    |                                                                             |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____                                                |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/10/06</u> .                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1-9, 12-13, and 15-20 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 12, and 15-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seth-Smith et al (USP 4,829,569), previously cited by examiner, in view of Eda et al (USP 5,760,820), previously cited by examiner and Mankovitz (WO 98/48566).

To serve as a brief overview of Eda, the reference discloses a system for the delivery of emergency information through the use of multiplexed video, audio, and emergency information signals making up the transport stream.

Regarding **claim 1**, the Seth-Smith reference discloses the following within the transmission device:

- The claimed “output form ID that indicates an output form of the sub contents, and output contents data that indicate output contents”, is met by the template page number, which is mapped in the EEPROM of the local device [col. 15, lines 60-65] and is used to grab the template page from the teletext stream coming from the transmitting device [col. 16, lines 1-5] according to the received addresses packet indicating that a personal message is available at a particular page number [col. 16, line 68 – col. 17, line 10].

The Seth-Smith reference further discloses the following within the reception device:

- The claimed “a memory that stores a reference table which associates at least one output form ID with at least one output form”, is met by the EEPROM which matches the template number to its corresponding template [col. 15, lines 60-65].
- The claimed “reconstructor that controls reconstruction of main contents data and sub contents data in accordance with the received transport stream”, is met by the MATS processor, which goes through the process of using templates and messages to construct viewable messages [col. 16, lines 6-20].
- The claimed “reconstructor extracting the output form ID from the sub contents data, determining an output form ID from subcontents data, determining an output form corresponding to the output form ID based on

the reference table”, is met, firstly, by the EEPROM, which maps the template to the template page number. The decoder extracts the template page number. [col. 15, lines 60- col. 16, line 5]. The process then grabs the indicated page when the teletext header including the page number is received [col. 16, lines 1-5]. In other words, the template is extracted from the broadcast stream once the processor receives a request for that template number via the addressed packet in the broadcaster-initiated teletext message [col. 16, line 68 – col. 17, line 10]. The processor then goes on to process and display the message, as described in column 16, lines 40-60.

The Seth-Smith reference does not disclose:

a) a multiplexer that multiplexes main contents data and sub contents data so as to generate a transport stream and a transmitter that transmits the transport stream generated by the multiplexer, the multiplexer generating the sub contents data including the output form ID and the actual data (as discussed above) within the transmission device.

b) a receiver that receives the transport stream transmitted by the transmission device within the reception device.

c) reconstructing the sub contents data and storing the main contents data in a memory, when the determined output form is a form for switching from display of main contents data to display of sub contents data

d) reconstructing main contents data stored in a memory, when the determined output form is a form for switching from display of sub contents data to display of main contents data

The Eda reference discloses a multiplexer (110 – Fig. 1) for multiplexing main contents (digital video and audio signals) and sub contents (digital information signal of text) and a transmitter (Fig. 1) for transmitting the multiplexed information to the subscribers [col. 7, lines 11-44]. Also, the Eda reference discloses that the multiplexer generates the sub contents data (digital information signal of text) using the information stream generator 107 [col. 7, lines 11-44].

The Eda reference discloses a receiver (Fig. 2) which utilizes a bit stream input terminal 201, a decoder 203, a demultiplexer 202, and a discriminator 204 for receiving the transport stream transmitted by the transmission device [col. 8, line 65 – col. 9, line 7].

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the intricate details of transmission and reception using a multiplexed system, as taught by Eda, into the system of Seth-Smith, in order to allow for a simple way to transmit extra information (such as data or text) while still only using a single transport stream, therefore making the process compatible with current multiplexed transmission and reception system and as well as making it stream-lined and straightforward. Furthermore, as is suggested by Seth-Smith, the transmitted signal can be a B-MAC signal, or B-format Multiplexed Analog Component Signal [col. 7, lines 12-17].

However, Seth-Smith and Eda fail to disclose steps c and d.

In an analogous art, Mankovitz teaches:

Reconstructing (displaying) the sub contents data (PRI – website data) and storing the main contents data (television program) in a memory (storage device 52), when the determined output form is a form for switching from display of main contents data to display of sub contents data [p.7, line 26 – p. 8, line 4].

Reconstructing main contents data stored in a memory, when the determined output form is a form for switching from display of sub contents data to display of main contents data (When the viewer selects returning to viewing of the television program, the display displays the streaming video data stored on the storage device [p. 8, lines 5-25, p. 9, lines 17-21]).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Seth-Smith and Eda's invention to include steps c and d, as taught by Mankovitz, for the advantage of allowing the user to view supplemental content in addition to not missing any part of the television program.

Regarding **claim 2**, see the above rejection for the transmission device of claim 1.

Regarding **claim 3**, see the above rejection for the reception device of claim 1.

Regarding **claim 4**, Seth-Smith, Eda, and Mankovitz teach all that is discussed above with regards to claim 1. Seth-Smith further teaches an EEPROM 116 [Fig. 13] that links the teletext page number with the template for the information display [col. 15,

lines 60-65]. This EEPROM is present in the decoder of Figure 13 and therefore meets the claimed "reception device according to claim 3, wherein an output form table describing the output form ID and the output form corresponding thereto is recorded in the reception device".

Regarding **claim 12**, the claimed "contents data in which main contents data and sub contents data are multiplexed, wherein the sub contents data include an output form ID corresponding to an output form of the sub contents data and output contents data that indicate output contents" is met as follows. Seth-Smith teaches a teletext page number which represents a template for use in displaying a message. The transmitter transmits an addressed packet with a message, indicating to the receiver that the message should appear according to a template located at the teletext page number [col. 16, line 68 – col. 17, line 10]. The output contents, in this case, being met by the teletext addressed packet message and the output form ID being met by the teletext page number. The claimed "output form instructs a receiving device to switch from display of main contents data to display of sub contents data or switch from display of sub contents data to display of main contents data" is met as follows. Mankovitz teaches that when a user interacts with the PRI (sub contents data) the microprocessor (24 – Fig. 1) commands to discontinue displaying the television program (main contents data) and to begin displaying the PRI data and vice versa (see rejection of claim 1).

However, Seth-Smith does not teach that the main contents (main A/V data) and the sub contents (teletext message and teletext page number) are multiplexed.



Eda teaches multiplexing video and audio streams (main contents), and information streams (sub contents) [col. 7, lines 12-26].

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the intricate details of transmission and reception using a multiplexed system, as taught by Eda, into the system of Seth-Smith, in order to allow for a simple way to transmit emergency information or commercials while still only using a single transport stream, therefore making the process compatible with current multiplexed transmission and reception system and as well as making it stream-lined and straight-forward. Furthermore, as is suggested by Seth-Smith, the transmitted signal can be a B-MAC signal, or B-format Multiplexed Analog Component Signal [col. 7, lines 12-17].

Regarding method **claim 15**, the claimed method for using a system including a transmission device and reception device is met by the above rejection of the system of claim 1. Claim 15 additionally calls for the following:

Acquiring an output form from the received sub contents data (As discussed above in claim 1, the sub contents data is the supplemental content which when the user selects is displayed on the screen. The supplemental content embedded in the signal is displayed.)

Regarding method **claim 16**, the claimed method for generating a transport stream is met by the above rejection of the transmission device of claim 1.

Regarding method **claim 17**, the claimed method for reconstructing a transport stream is met by the above rejection of the reception device of claims 1 and 15.

Regarding system **claim 18**, the claimed "system according to claim 1, wherein the sub contents data includes one of an output form ID and a script, the reconstructor determined whether the received sub contents data includes an output form ID which corresponds to an output form ID stored in a reference table of the reception device, if the sub contents data includes an output form ID that corresponds to an output form ID stored in the reference table, the reception device presents the output contents in an output form corresponding to the stored output form ID, and if the sub contents data does not include an output form ID that corresponds to an output form ID stored in the reference table, the reception device presents the output contents based upon a script included in the sub contents data" is met as follows. The MATS processor goes through the process of using templates and messages to construct viewable messages [col. 16, lines 6-20]. Firstly, the EEPROM maps the template to the template page number [col. 15, lines 60-65]. The teletext addressable message contains the template page number and the personal message page number. The template page number (which is transmitted in the broadcast stream) consists of the script for outputting the received message [col. 16, line 65 – col. 17, line 10]. The process grabs the indicated page when the teletext header including the page number is received [col. 16, lines 1-5]. In other words, the template is grabbed from the broadcast stream once the processor receives a request for that template number via the addressed packet in the

broadcaster-initiated teletext message [col. 16, line 68 – col. 17, line 10]. If the template is not already stored in the RAM, then the template must be received in script form from within the teletext stream [col. 18, lines 36-39 & col. 20, lines 61-68]. The processor then goes on to process and display the message, as described in column 16, lines 40-60.

Regarding **claim 19**, see the above rejections to claims 1, 2, and 18.

Regarding **claim 20**, see the above rejections to claims 1, 3, and 18.

Regarding **claims 21 and 22**, see the above rejection to claim 1. Claim 21 additionally calls for extracting defining information. In this case, defining information would be the time-stamp data. The system uses time-shifting. Therefore, once the user begins viewing supplemental content, the time-stamp data of the television program is extracted such that when the user ends viewing the supplemental content, the television program is resumed from where the user left off, and the currently broadcasted part is recorded for the user to catch up later on – See Mankovitz, p. 7, line 19 – p. 8, line 25.

Regarding **claim 23**, Seth-Smith teaches that the template is displayed based on the output form ID. The template indicates the display position of the sub contents data – col. 15, line 60 – col. 16, line 20.

Regarding **claim 24**, Seth-Smith teaches wherein the output form includes information indicating whether the sub contents data are outputted. By having all the text lines displayed in the template, information indicating that the sub content data are outputted is displayed – col. 16, lines 1-20.

Regarding **claim 25**, Seth-Smith, Eda, and Mankovitz fail to teach wherein the output form includes an output time of the sub contents data.

The Examiner takes Official Notice that it is well known in the art to have the output time of the sub contents data indicated such that the sub contents data is displayed at a desired time.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Seth-Smith, Eda, and Mankovitz's invention to include the output time of the sub contents data indicated such that the sub contents data is displayed at a desired time.

Regarding **claim 26**, Seth-Smith teaches wherein the output form includes an output condition of the sub contents data. In particular, Seth-Smith teaches that the template is predefined and that the sub contents data is displayed in the respective fields within the template. Therefore, the output form includes output conditions of where to display the sub contents data – col. 6, lines 7-15, col. 15, line 60 – col. 16, line 20.

4. Claims 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seth-Smith et al (USP 4,829,569), previously cited by examiner, in view of Eda et al (USP 5,760,820), previously cited by examiner, and Mankovitz and further in view of Lemmons et al (USPN 6,442,755), cited by Examiner.

Regarding **claim 5**, Seth-Smith and Eda teach all of that which is discussed above with reference to claim 1. Neither, however, teach a "transmission device according to claim 3, wherein the output form includes a display position of the sub contents data". While Seth-Smith does teach a template for displaying teletext messages, he does not go into the specifics of the template layout or design. Lemmons, on the other hand, goes into great detail about the layout and design of a template for providing EPG information delivered via communication link 18 with the video data. In column 6, line 48, Lemmons discloses positioning of screen data according to the HTML/XML/DHTML template. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to modify the template or layout of the screen according to a display position, in order to update template views to reflect currently used features and layouts. Also, the Seth-Smith reference clearly suggests that programming schedules are a form of sub content that can be used [col. 12, line 55].

Regarding **claim 6**, Seth-Smith and Eda teach all of that which is discussed above with reference to claim 1. Neither, however, teach a "transmission device

according to claim 2, wherein the output form includes information indicating whether the sub contents data are outputted". While Seth-Smith does teach a template for displaying teletext messages, he does not go into the specifics of the template layout or design. Lemmons, on the other hand, goes into great detail about the layout and design of a template for providing EPG information delivered via communication link 18 with the video data. In column 10, lines 33-37, Lemmons discloses that content can be seen or hidden according to the HTML/XML/DHTML template. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to modify the template or layout of the screen according to a hidden or visible value, in order to update template views to reflect currently used features and layouts. Also, the Seth-Smith reference clearly suggests that programming schedules are a form of sub content that can be used [col. 12, line 55].

Regarding **claim 7**, Seth-Smith and Eda teach all of that which is discussed above with reference to claim 1. Neither, however, teach a "transmission device according to claim 2, wherein the output form includes an output time of the sub contents". While Seth-Smith does teach a template for displaying teletext messages, he does not go into the specifics of the template layout or design. Lemmons, on the other hand, goes into great detail about the layout and design of a template for providing EPG information delivered via communication link 18 with the video data. In column 7, lines 18-23, Lemmons discloses that content can be provided manually or automatically at a pre-defined time. It would have been clearly obvious to one of ordinary skill in the art at

the time of the invention to modify the template or layout of the screen according to displaying the content at a pre-defined time, in order to update template views to reflect currently used features and layouts. Also, the Seth-Smith reference clearly suggests that programming schedules are a form of sub content that can be used [col. 12, line 55].

Regarding **claim 8**, Seth-Smith and Eda teach all of that which is discussed above with reference to claim 1. Neither, however, teach a "transmission according to claim 2, wherein the output form includes an output condition of the sub contents data". While Seth-Smith does teach a template for displaying teletext messages, he does not go into the specifics of the template layout or design. Lemmons, on the other hand, goes into great detail about the layout and design of a template for providing EPG information delivered via communication link 18 with the video data. In column 8, lines 55-56, Lemmons discloses that the template can define style of text, colors, and special effects. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to modify the template or layout of the screen according to output conditions of the output contents, in order to update template views to reflect currently used features and layouts. Also, the Seth-Smith reference clearly suggests that programming schedules are a form of sub content that can be used [col. 12, line 55].

Regarding **claim 9**, Seth-Smith and Eda teach all of that which is discussed above with reference to claim 1. Neither, however, teach a "reception device according

to claim 3, wherein the reception device determines the output form of the sub contents in accordance with a predetermined output form when the received output form ID is not a predetermined one". The Seth-Smith reference does teach the concept of the output form ID (previously discussed as being met by the teletext page number), however, fails to disclose a default output form being used in the absence of a valid output form ID. Lemmons teaches a default template layout that is present in the system upon manufacture and which can be subsequently updated without user intervention [col. 2, lines 31-36]. The Lemmons reference has the stored, default layout and is forced to use that layout until an update is available and automatically downloaded. This reads on the fact that the sub contents (EPG data) are output according to the pre-stored output form (layout HTML/DHTML/XML information) when the output form ID (as discussed in Seth-Smith) is not present. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a default template for dealing with the situation where an invalid or no template ID is provided, in order to always have a way of viewing sub content data and to allow for user screens and program guide functionality anytime. Also, the Seth-Smith reference clearly suggests that programming schedules are a form of sub content that can be used [col. 12, line 55].

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP



§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sumaiya A. Chowdhury whose telephone number is (571) 272-8567. The examiner can normally be reached on Mon-Fri, 9-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SAC



CHRISTOPHER GRANT  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600